

Section 1

1999 Total Crashes, Injury Crashes and Fatal Crashes

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Utah Crashes 1969 - 1999

From 1969 to 1999, over 1.4 million crashes occurred in Utah. Approximately 400,000 of the crashes involved injuries and 8,529 involved fatalities. During this 30-year time span, the total crash rates, injury crash rates, and fatal crash rates have all decreased significantly (Table 1.01).

In 1999, the total crash rate per 100 million vehicle miles traveled in Utah was 241.5; a 5% decrease from the 1998 rate. The decrease was even more substantial for injury crash rates in 1999 with a 12% decline from the 1998 rate. The fatal crash rate remained unchanged from 1998 to 1999.

Several factors may account for these changes. One factor may be the changes in the crash reporting criteria. Most notably, 1997 was the first year crashes occurring on private property were excluded. This change in the reporting system could account for the decrease in total crashes and injury crashes from the previous years. It would not impact the reporting of fatal crashes because all fatal crashes are reported regardless of whether they occur on private property or not. Another factor may be improvements in the medical system. As more lives are saved, the number of fatalities may be reduced, but the number of injuries reported may increase. Other factors that impact the decrease in the number of crashes, as well as the severity of crash injuries include: increased seatbelt use; improvements in the design of the roadways and vehicles; legislation such as speed limits, impaired driving laws, and graduated driver licensing laws.

It is important to note that when doing comparisons between years, rates should be used rather than the crude number of events. Rates provide a more accurate picture of trends over time. The rates used in this report are based on the annual vehicle miles traveled. The Utah Department of Transportation supplies the number of vehicle miles traveled each year.

Table 1.01 Total Crashes, Injury Crashes and Fatal Crashes, Utah 1969-1999

Year	Million Vehicle Miles Traveled (MVMT)	Total Crashes	Injury Crashes	Fatal Crashes	Total Crash Rate per 100 MVMT	Injury Crash Rate Per 100 MVMT	Fatal Crash Rate per 100 MVMT
1969	5,802	34,766	9,850	251	599.2	169.8	4.3
1970	6,108	35,166	10,722	276	575.7	175.5	4.5
1971	6,544	39,108	11,399	280	597.6	174.2	4.3
1972	6,969	39,856	11,630	312	571.9	166.9	4.5
1973	7,274	38,234	11,710	304	525.6	161.0	4.2
1974	7,457	31,401	10,560	204	421.1	141.6	2.7
1975	7,942	36,426	11,441	245	458.7	144.1	3.1
1976	8,420	34,345	11,685	225	407.9	138.8	2.7
1977	9,054	38,524	12,652	310	425.5	139.7	3.4
1978	9,826	42,684	13,423	315	434.4	136.6	3.2
1979	9,811	40,468	13,449	287	412.5	137.1	2.9
1980	10,645	33,582	11,701	292	315.5	109.9	2.7
1981	10,733	35,989	11,824	321	335.3	110.2	3.0
1982	10,947	38,192	11,504	263	348.9	105.1	2.4
1983	11,228	40,989	12,317	253	365.1	109.7	2.3
1984	11,642	47,489	13,477	274	407.9	115.8	2.4
1985	12,035	47,871	13,917	270	397.8	115.6	2.2
1986	12,253	46,690	13,988	276	381.0	114.2	2.3
1987	12,679	47,256	13,599	271	372.7	107.3	2.1
1988	13,263	49,249	13,377	258	371.3	100.9	1.9
1989	13,915	51,320	13,941	269	368.8	100.2	1.9
1990	14,646	52,691	14,632	236	359.8	99.9	1.6
1991	15,390	47,435	13,763	229	308.2	89.4	1.5
1992	16,263	50,660	15,665	235	311.5	96.3	1.4
1993	17,055	55,704	17,088	259	326.6	100.2	1.5
1994	18,080	59,272	18,726	303	327.8	103.6	1.7
1995	18,786	57,644	19,828	284	306.8	105.5	1.5
1996	19,433	61,505	20,988	292	316.5	108.0	1.5
1997	20,408	54,952	21,131	309	269.3	103.5	1.5
1998	21,237	54,072	19,427	308	254.6	91.5	1.5
1999	21,867	52,802	19,513	318	241.5	89.2	1.5
Total	387,712	1,396,342	438,927	8,529	360.1	113.2	2.2

Injury and Fatal Crashes Trends 1969 - 1999

Figure 1.01 reflects the decreasing trend in injury crash rates per 100 million vehicle miles traveled (MVMT) from 1969 to 1999. The injury crash rates were highest in the early 1970s. A large decrease occurred in 1980, followed by a slight increase between 1990 to 1997.

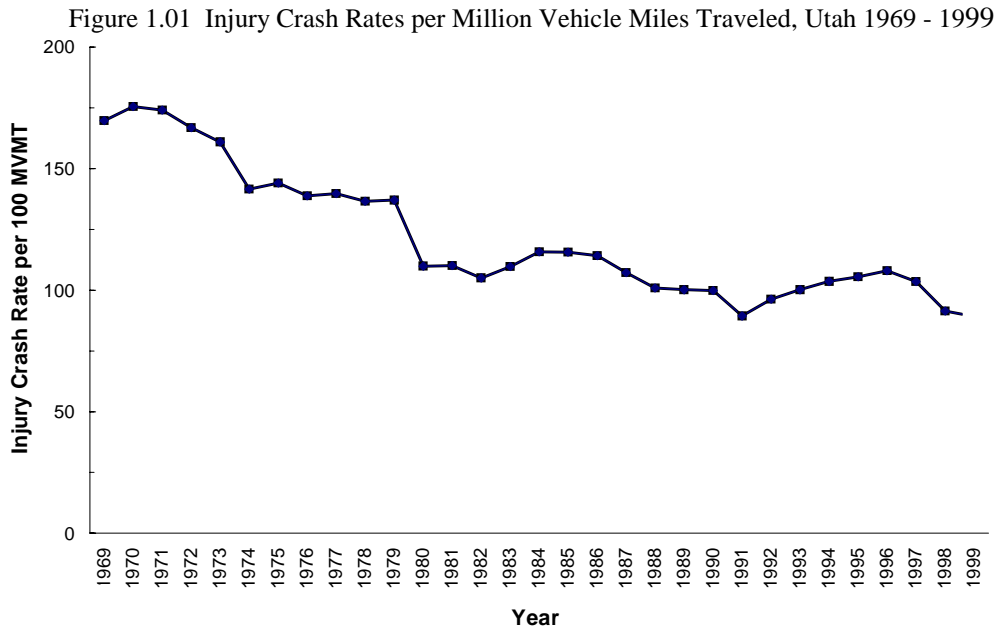
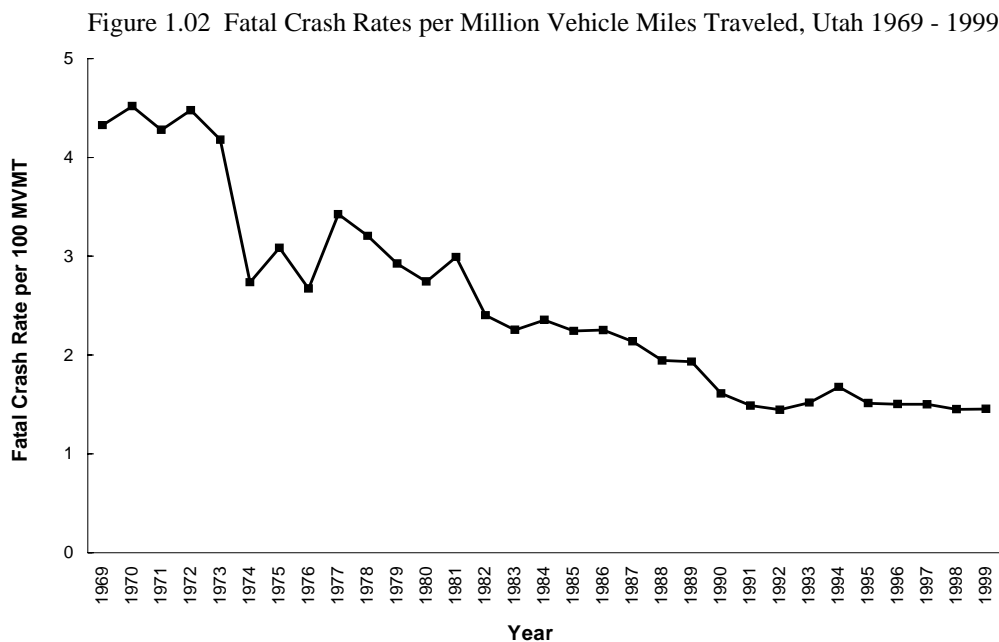


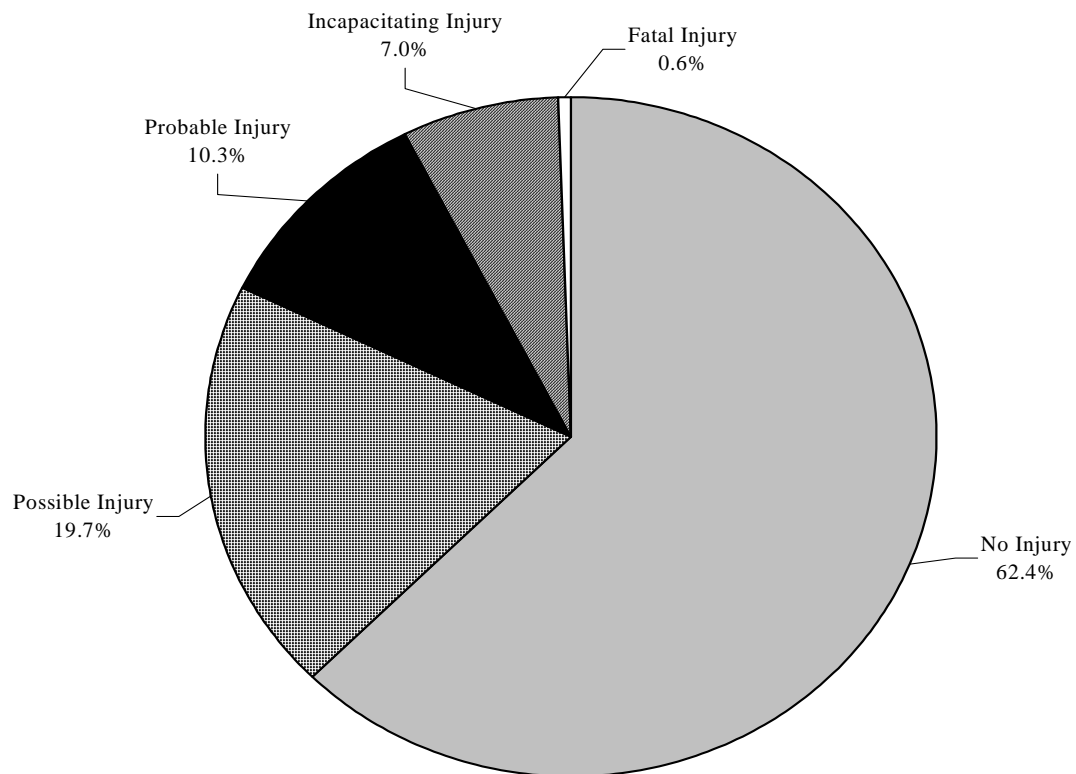
Figure 1.02 reflects the decreasing trend in fatal crash rates per 100 million vehicle miles traveled (MVMT) from 1969 to 1999. The fatal crash rates have markedly decreased from 1970 (4.5 per 100 MVMT) to 1999 (1.5 per 100 MVMT). The biggest decrease in fatal crash rates occurred in 1973, the same year the speed limit was lowered to 55 MPH.



1999 Crash Severity

Figure 1.03 shows the breakdown of crash severity as recorded by the police. The majority (62.4%) of crashes resulted in property damage only; 37.6% of crashes resulted in some level of injury; and fatal crashes represented only 0.6% of crashes in Utah.

Figure 1.03 Severity of Crashes as Reported by Police, Utah 1999 (n=52,802)



1999 Crashes by County

Figure 1.04 depicts the number of injury and fatal crashes for each county in Utah. For rates of total crashes, injury crashes and fatal crashes see Table 1.02 .

Figure 1.04 Injury (I) and Fatal (F) Crashes by County, Utah 1999

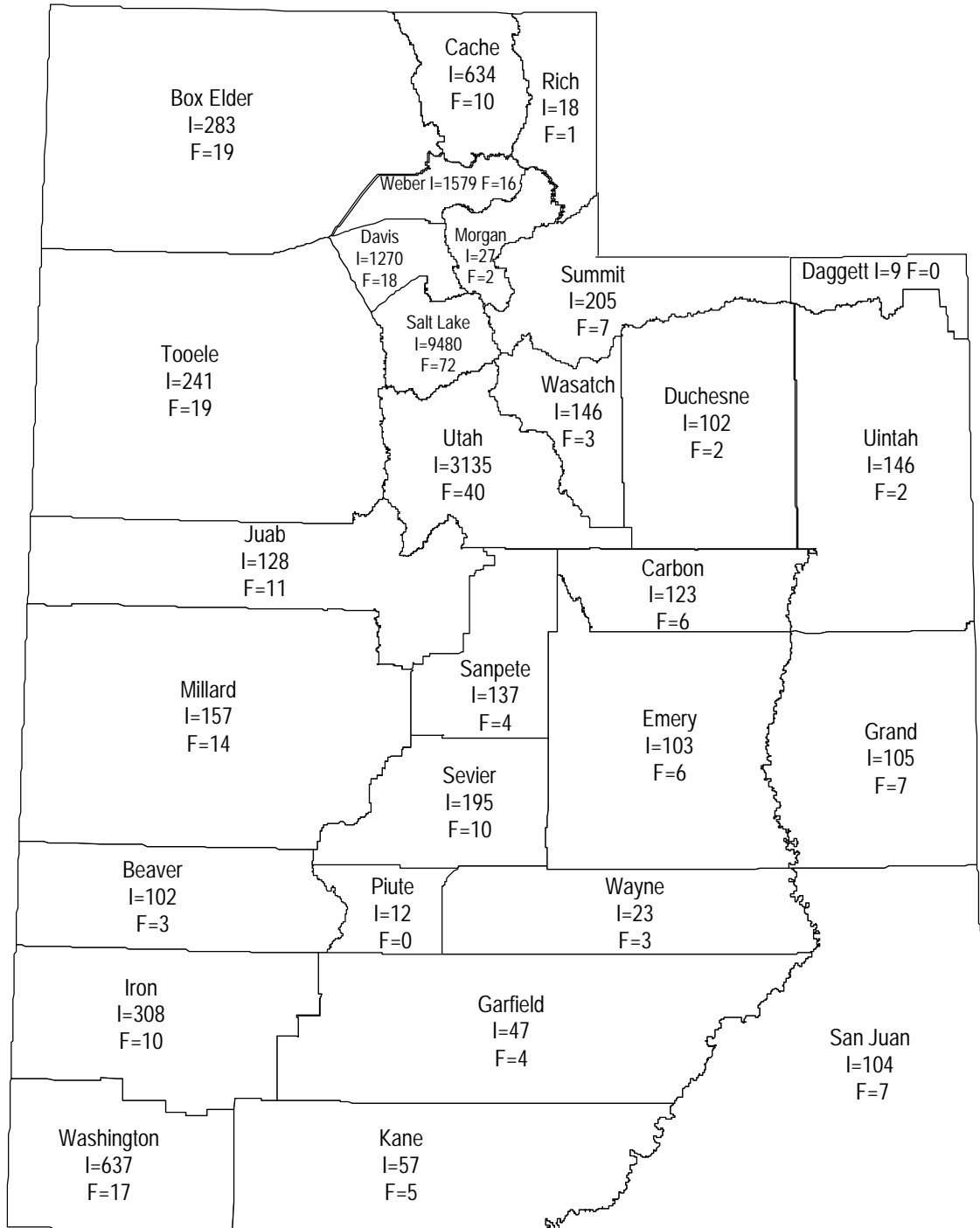


Table 1.02 shows the rates of total crashes, injury crashes and fatal crashes for each county. Two different rates are given in Table 1.02; one based on population of the county, and the other on the miles traveled in the county. The rate of crashes per miles traveled provides a more accurate reflection of the motor vehicle crash risk. Cases where the crash rate per population is higher than the rate per miles traveled may indicate that the county has a large number of non-county drivers. Salt Lake, Utah and Weber had the highest total crash and injury crash rates per miles traveled, while Wayne, Kane and Millard counties had the highest rates of fatal crashes.

Table 1.02 Total Crashes, Injury Crashes and Fatal Crashes by County, Utah 1999

County	Total Crashes			Injury Crashes			Fatal Crashes		
	#	Rate per MVMT	Rate per 10,000 Population	#	Rate per 10 MVMT	Rate per 10,000 Population	#	Rate per 100 MVMT	Rate per 10,000 Population
Beaver	295	1.4	439.8	102	4.9	152.1	3	1.4	4.5
Box Elder	856	1.0	204.0	283	3.2	67.4	19	2.2	4.5
Cache	1,961	2.6	212.1	634	8.3	68.6	10	1.3	1.1
Carbon	410	1.2	183.2	123	3.6	54.9	6	1.7	2.7
Daggett	34	1.5	402.8	9	3.9	106.6	0	0.0	0.0
Davis	3,899	1.9	168.4	1,270	6.3	54.9	18	0.9	0.8
Duchesne	298	1.6	208.0	102	5.6	71.2	2	1.1	1.4
Emery	295	0.9	265.3	103	3.0	92.6	6	1.7	5.4
Garfield	149	1.1	318.0	47	3.6	100.3	4	3.0	8.5
Grand	261	0.9	249.8	105	3.8	100.5	7	2.5	6.7
Iron	867	1.6	260.3	308	5.6	92.5	10	3.0	3.0
Juab	325	1.0	404.7	128	3.8	159.4	11	3.3	13.7
Kane	206	1.7	283.0	57	4.6	78.3	5	4.0	6.9
Millard	445	1.1	350.3	157	3.8	123.6	14	3.4	11.0
Morgan	133	1.2	192.5	27	2.4	39.1	2	1.7	2.9
Piute	42	1.4	255.6	12	3.9	73.0	0	0.0	0.0
Rich	62	1.3	331.7	18	3.8	96.3	1	2.1	5.4
Salt Lake	24,307	3.4	282.4	9,480	13.2	110.1	72	1.0	0.8
San Juan	343	1.3	255.9	104	4.1	77.6	7	2.7	5.2
Sanpete	395	1.7	180.5	137	6.0	62.6	4	1.7	1.8
Sevier	583	1.5	303.0	195	5.2	101.4	10	2.7	5.2
Summit	806	1.4	303.2	205	3.5	77.1	7	1.2	2.6
Tooele	719	1.1	207.7	241	3.8	69.6	19	3.0	5.5
Uintah	461	1.7	186.5	146	5.4	59.1	2	0.7	0.8
Utah	8,146	3.4	240.1	3,135	13.2	92.4	40	1.7	1.2
Wasatch	525	2.2	375.1	146	6.0	104.3	3	1.2	2.1
Washington	1,737	2.1	209.6	637	7.7	76.9	17	2.0	2.1
Wayne	86	2.1	334.8	23	5.7	89.5	3	7.4	11.7
Weber	4,156	2.8	222.0	1,579	10.6	84.3	16	1.1	0.9
Statewide	52,802	2.4	247.3	19,513	8.9	91.4	318	1.5	1.5

1999 Crashes by City

The crash rates per population for cities with over 200 crashes in 1999 are shown in Table 1.03. While South Salt Lake had the highest rate of total crashes, Riverdale had the highest rate of injury crashes, and Lindon had the highest rate of fatal crashes.

Table 1.03 Total Crash, Injury Crash and Fatal Crash Rates of Cities with More than 200 Crashes, Utah 1999

City	Total Crashes Rate Per 100,000		Injury Crashes Rate Per 100,000		Fatal Crashes Rate Per 100,000	
	#	Population	#	Population	#	Population
Salt Lake	4064	2285.2	2388	1342.8	19	10.7
West Valley	2842	2759.1	1150	1116.5	5	4.9
Provo	2540	2482.2	1033	1009.5	5	4.9
Ogden	2098	3149.8	777	1166.5	5	7.5
Murray	2049	5877.0	673	1930.3	6	17.2
Sandy	2008	2021.8	777	782.4	5	5.0
Orem	1989	2414.3	740	898.2	8	9.7
South Salt Lake	1246	6568.6	371	1955.8	1	5.3
West Jordan	1177	1907.7	393	637.0	6	9.7
Logan	1103	2541.1	356	820.2	0	0.0
St. George	1082	2219.7	370	759.1	3	6.2
Layton	963	1801.2	327	611.6	2	3.7
Taylorsville	894	1517.8	283	480.5	1	1.7
Midvale	782	2767.9	232	821.2	0	0.0
Draper	645	2582.7	206	824.9	2	8.0
Bountiful	608	1511.7	192	477.4	1	2.5
American Fork	424	1998.4	149	702.3	1	4.7
Cedar	421	1902.8	122	551.4	2	9.0
Clearfield	419	1798.6	128	549.5	3	12.9
Riverdale	411	5605.6	157	2141.3	2	27.3
Roy	409	1286.4	162	509.5	2	6.3
South Jordan	385	1458.1	124	469.6	0	0.0
Centerville	361	2321.2	120	771.6	1	6.4
Springville	355	2073.2	134	782.6	1	5.8
Riverton	312	1138.9	95	346.8	2	7.3
Spanish Fork	312	1867.8	118	706.4	2	12.0
Pleasant Grove	283	1392.3	117	575.6	3	14.8
North Salt Lake	253	3085.4	68	829.3	2	24.4
South Ogden	247	1678.6	121	822.3	0	0.0
Tooele	243	1437.3	50	295.7	1	5.9
Lindon	231	3486.3	87	1313.0	2	30.2
Kaysville	222	1196.3	85	458.0	1	5.4
Lehi	209	1342.7	77	494.7	1	6.4

1999 Crash Times

Table 1.04 shows that total crashes and injury crashes were more likely to occur between 2 p.m. and 6 p.m., with a peak at 5 p.m. (evening rush hour). Fatal crashes followed a similar pattern with the peak occurring between 5 p.m. and 7 p.m., with a high percentage in the early morning from 6 a.m. to 7 a.m., and in the late afternoon 1 p.m. to 3 p.m. (Figure 1.05).

Table 1.04 Hour of Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Hour	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
12 a.m.	782	1.5%	278	1.4%	9	2.8%
1 a.m.	620	1.2%	247	1.3%	8	2.5%
2 a.m.	459	0.9%	188	1.0%	8	2.5%
3 a.m.	309	0.6%	129	0.7%	7	2.2%
4 a.m.	324	0.6%	143	0.7%	5	1.6%
5 a.m.	558	1.1%	182	0.9%	8	2.5%
6 a.m.	1,140	2.2%	361	1.9%	15	4.7%
7 a.m.	2,482	4.7%	851	4.4%	19	6.0%
8 a.m.	2,373	4.5%	837	4.3%	6	1.9%
9 a.m.	1,964	3.7%	672	3.4%	13	4.1%
10 a.m.	2,043	3.9%	762	3.9%	7	2.2%
11 a.m.	2,669	5.1%	955	4.9%	15	4.7%
12 p.m.	3,379	6.4%	1,219	6.2%	13	4.1%
1 p.m.	3,181	6.0%	1,217	6.2%	18	5.7%
2 p.m.	3,583	6.8%	1,378	7.1%	19	6.0%
3 p.m.	4,255	8.1%	1,613	8.3%	19	6.0%
4 p.m.	4,557	8.6%	1,747	9.0%	16	5.0%
5 p.m.	5,097	9.7%	1,886	9.7%	20	6.3%
6 p.m.	3,825	7.2%	1,434	7.3%	20	6.3%
7 p.m.	2,594	4.9%	974	5.0%	20	6.3%
8 p.m.	1,971	3.7%	743	3.8%	14	4.4%
9 p.m.	1,978	3.7%	713	3.7%	14	4.4%
10 p.m.	1,562	3.0%	576	3.0%	16	5.0%
11 p.m.	1,097	2.1%	408	2.1%	9	2.8%
Grand Total	52,802	100.0%	19,513	100.0%	318	100.0%

Figure 1.05 Hour of Injury Crashes and Fatal Crashes, Utah 1999 (see Table 1.04 for values)

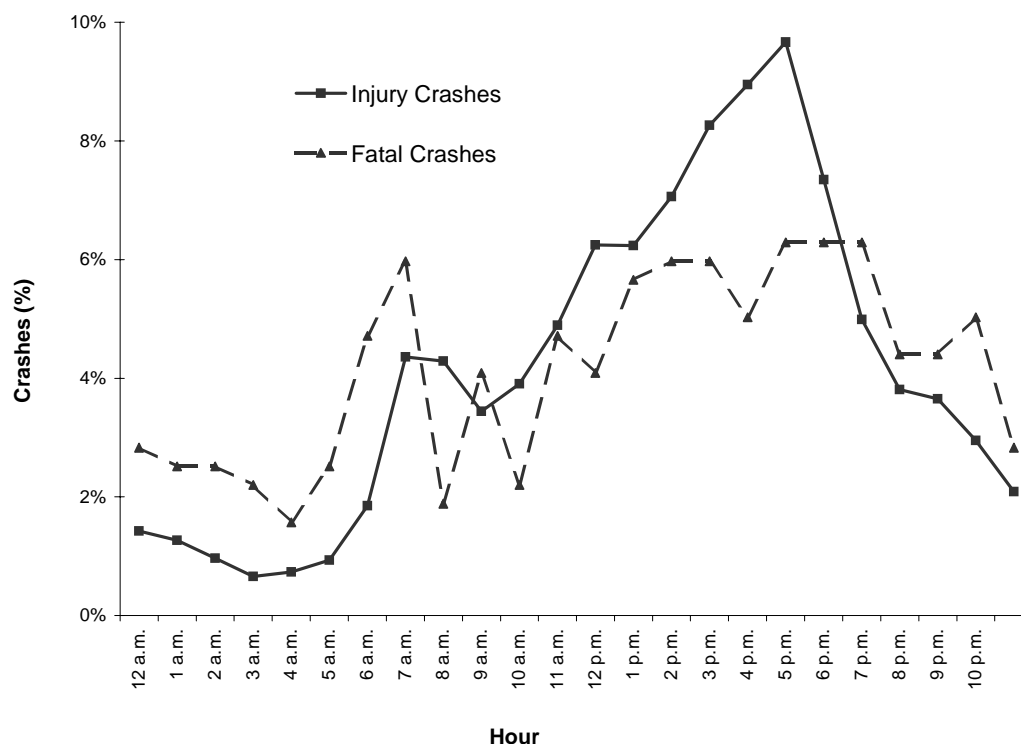


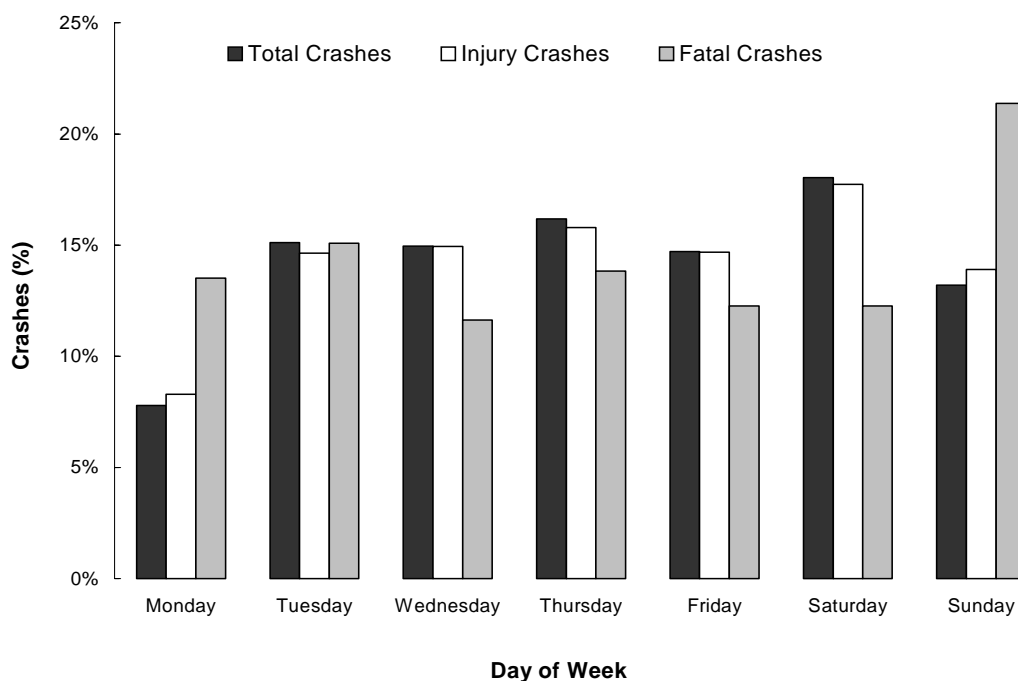
Table 1.05 shows that December had the highest rate of total crashes per day, while the months from April to October had the highest rates of fatal crashes per day. In fact, 68% of all fatal crashes occurred between April and October.

Table 1.05 Month of Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Crash Month	Total Crashes		Injury Crashes		Fatal Crashes	
	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	3,921	126.5	1,355	43.7	18	0.6
February	3,732	133.3	1,241	44.3	16	0.6
March	4,040	130.3	1,501	48.4	23	0.7
April	4,265	142.2	1,584	52.8	31	1.0
May	4,168	134.5	1,652	53.3	27	0.9
June	4,442	148.1	1,717	57.2	30	1.0
July	4,573	147.5	1,744	56.3	41	1.3
August	4,749	153.2	1,773	57.2	28	0.9
September	4,478	149.3	1,744	58.1	25	0.8
October	4,860	156.8	1,831	59.1	36	1.2
November	4,417	147.2	1,644	54.8	22	0.7
December	5,157	166.4	1,727	55.7	21	0.7
Grand Total	52,802	144.7	19,513	53.5	318	0.9

Figure 1.06 and Table 1.06 show that the highest percentage of total crashes and injury crashes occurred on Saturday. However, crashes occurring on Sunday were 1.8 times more likely to involve a fatality compared to crashes that occurred on other days of the week. The majority of Sunday fatal crashes occurred during the early morning hours. These crashes tended to be alcohol-related which increases the likelihood for a fatality.

Figure 1.06 Day of Week for Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999



Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the days of the week. For example, look at only the white bars (i.e. injury crashes) from day to day. Do not compare the heights of the different crash categories for a specific day.

Table 1.06 Day of Week for Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Day of Week	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Monday	4,115	7.8%	1,617	8.3%	43	13.5%
Tuesday	7,983	15.1%	2,856	14.6%	48	15.1%
Wednesday	7,900	15.0%	2,916	14.9%	37	11.6%
Thursday	8,542	16.2%	3,081	15.8%	44	13.8%
Friday	7,770	14.7%	2,866	14.7%	39	12.3%
Saturday	9,520	18.0%	3,462	17.7%	39	12.3%
Sunday	6,972	13.2%	2,715	13.9%	68	21.4%
Grand Total	52,802	100.0%	19,513	100.0%	318	100.0%

Holiday Crashes 1997 - 1999

Table 1.07 shows the number of fatal crashes that occurred on holidays for the past three years. The number of days included in a holiday varied by year. When a holiday falls on Monday, the holiday begins at noon the Friday before the holiday, and ends at midnight on the holiday. If a holiday does not fall on the weekend, the holiday begins at noon the day before the holiday, and ends on midnight the day after the holiday. Because of the differing lengths of holidays, the rate per day is provided and should be used to compare holidays by year. Holidays are a concern due to the increased motor vehicle travel combined with other risk factors (e.g., alcohol and other drug impaired driving, fatigued driving). July 4th was the holiday with the highest rate of fatal crashes for 1997, Thanksgiving had the highest rate of fatal crashes for 1998, and Memorial Day had the highest rate of fatal crashes in 1999. The fatal crash rate per day was 1.1 between Memorial Day and Labor Day, which was slightly larger than the total fatal crash rate per day of 0.9.

Table 1.07 Fatal Crashes by Holiday, Utah 1997 - 1999

Holiday	1997 Fatal Crashes		1998 Fatal Crashes		1999 Fatal Crashes	
	#	Rate per day	#	Rate per day	#	Rate per day
New Years	3	1.0	2	0.4	0	0.0
Memorial Day	3	0.8	2	0.5	7	1.8
July 4th	7	1.8	2	0.7	5	1.7
July 24th	1	0.3	2	0.5	4	1.0
Labor Day	4	1.0	4	1.0	4	1.0
Thanksgiving	6	1.2	10	2.5	3	0.8
Christmas	2	0.4	2	0.5	1	0.3
Total	26	0.9	24	0.9	24	0.9

1999 Crash Characteristics

Table 1.08 shows crashes involving two motor vehicles represented the majority of crashes (72.9%). Pedestrian-motor vehicle crashes represented 1.4% of all crashes, but accounted for 11% of fatal crashes resulting in a 9-fold increased risk of a fatality. In addition when a vehicle ran off the roadway (to the right, to the left, and through the median), there was a 7-fold increased risk of a fatality.

Table 1.08 Types of Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Crash Type	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Two Motor Vehicles	38,518	72.9%	13,714	70.3%	91	28.6%
Ran Off Roadway - To the Right	3,425	6.5%	1,565	8.0%	75	23.6%
Motor Vehicle and Wild Animal	2,201	4.2%	156	0.8%	2	0.6%
Motor Vehicle and Fixed Object	2,049	3.9%	652	3.3%	11	3.5%
Ran Off Roadway - To the Left	1,873	3.5%	874	4.5%	40	12.6%
Other Non-Collision	1,159	2.2%	355	1.8%	5	1.6%
Motor Vehicle and Bicycle	804	1.5%	732	3.8%	6	1.9%
Motor Vehicle and Pedestrian	720	1.4%	661	3.4%	35	11.0%
Ran Off Roadway Through Median	598	1.1%	301	1.5%	35	11.0%
Motor Vehicle and Other Object	558	1.1%	111	0.6%	2	0.6%
Overturned in Roadway	450	0.9%	295	1.5%	9	2.8%
Motor Vehicle and Domestic Animal	422	0.8%	86	0.4%	4	1.3%
Motor Vehicle and Train	25	0.0%	11	0.1%	3	0.9%
Grand Total	52,802	100.0%	19,513	100.0%	318	100.0%

Table 1.09 shows the majority of crashes (75.3%) occurred in urban areas. However, the majority of fatal crashes (62.9%) occurred in rural areas. In fact, rural crashes were 5 times more likely to result in a fatality than other crashes.

Table 1.09 Urban / Rural Location of Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Urban / Rural Location	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Rural Area - Up to 5,000	13,015	24.6%	4,229	21.7%	200	62.9%
Small Urban - 5,000 to 49,999	2,462	4.7%	786	4.0%	8	2.5%
Moderate Urban - 50,000 to 199,999	1,275	2.4%	428	2.2%	1	0.3%
Large Urban - 200,000 or More	36,026	68.2%	14,064	72.1%	109	34.3%
Missing	24	0.0%	6	0.0%	0	0.0%
Grand Total	52,802	100.0%	19,513	100.0%	318	100.0%

Table 1.10 shows the leading collision types were a rear end (29.3%) and a broadside (24.1%). These were also the leading injury collision types. The leading fatal collision type was a single vehicle rollover (19.5%), followed by single vehicle fixed object (17.9%) and side swipe (15.7%). Head-on collisions were 6 times more likely to result in a fatality than other collisions. Single vehicle rollovers were also 6 times more likely to result in a fatality than other collisions.

Table 1.10 Collision Description of Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Collision Description	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Rear End	15,492	29.3%	5,951	30.5%	9	2.8%
Broadside	12,751	24.1%	5,813	29.8%	30	9.4%
Other	12,481	23.6%	2,121	10.9%	16	5.0%
Single Vehicle Fixed Object	3,674	7.0%	1,412	7.2%	57	17.9%
Side Swipe	3,206	6.1%	683	3.5%	50	15.7%
Single Vehicle Rollover	2,090	4.0%	1,337	6.9%	62	19.5%
Pedestrian/Bicyclist Crash	1,524	2.9%	1,393	7.1%	41	12.9%
Single Vehicle Other	1,232	2.3%	599	3.1%	41	12.9%
Head-on	352	0.7%	204	1.0%	12	3.8%
Grand Total	52,802	100.0%	19,513	100.0%	318	100.0%

Table 1.11 shows the majority of vehicles involved in Utah crashes were passenger cars (55.4%). While motorcycles represented less than 1% of vehicles involved in crashes, they represented 4.6% of vehicles in fatal crashes. Crashes involving a motorcycle were 9 times more likely to be fatal than crashes involving other vehicles. Crashes involving a large/semi truck were 3 times more likely to be fatal than crashes involving other vehicles.

Table 1.11 Type of Vehicles Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Vehicle Type	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Passenger Car	54,931	55.4%	21,381	57.4%	170	43.5%
Pickup Truck / Vans	38,705	39.1%	13,793	37.0%	217	40.3%
Large/Semi Truck	3,221	3.3%	922	2.5%	46	8.9%
Other	1,391	1.4%	509	1.4%	8	46.2%
Motorcycle	693	0.7%	614	1.6%	26	4.6%
School Bus	158	0.2%	38	0.1%	2	0.0%
Grand Total	99,099	100.0%	37,257	100.0%	469	100.0%

1999 Crash Violations and Contributing Factors

Officers at the scene cited 51.8% of drivers involved in a crash for a traffic violation. Table 1.12 shows the leading violation for all crashes was "failure to yield right of way" (26.8%). The top violations in fatal crashes were "failure to yield right of way" (20.4%) and "driving under the influence" (16.3%). Drivers cited for driving under the influence were 7 times more likely to be involved in a fatal crash than drivers cited for other violations. Drivers cited for speeding were 2 times more likely to be involved in a fatal crash than drivers cited for other violations.

Table 1.12 Violations for Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Violations	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Failure to Yield Right of Way	13,322	26.8%	5,790	28.9%	10	20.4%
Improper Lookout	12,190	24.5%	4,680	23.4%	0	0.0%
Following Too Close	4,687	9.4%	1,658	8.3%	0	0.0%
Speeding	4,060	8.2%	1,570	7.8%	6	12.2%
Other Non-Moving Violations	3,419	6.9%	1,406	7.0%	6	12.2%
All Other Moving Violations	2,725	5.5%	1,034	5.2%	6	12.2%
Failure to Stop at Red Light	1,685	3.4%	909	4.5%	0	0.0%
Driving Under the Influence	1,433	2.9%	829	4.1%	8	16.3%
Negligent Collision	1,414	2.8%	554	2.8%	0	0.0%
Improper Turn	1,302	2.6%	446	2.2%	1	2.0%
Improper Lane Change	834	1.7%	200	1.0%	0	0.0%
Failure to Stop at Stop Sign	529	1.1%	281	1.4%	0	0.0%
Reckless Driving	500	1.0%	246	1.2%	2	4.1%
Improper Passing	432	0.9%	136	0.7%	0	0.0%
Hit and Run	370	0.7%	106	0.5%	2	4.1%
Improper Backing	357	0.7%	29	0.1%	0	0.0%
Wrong Side of Road	259	0.5%	117	0.6%	1	2.0%
Improper Start or Stop	153	0.3%	36	0.2%	0	0.0%
Wrong Way on One Way Street	7	0.0%	4	0.0%	0	0.0%
Vehicular Homicide	7	0.0%	0	0.0%	7	14.3%
Grand Total	49,685	100.0%	20,031	100.0%	49	100.0%

The factors contributing to crashes in 1999 are listed in Table 1.13. These factors were coded by the scene officers for each vehicle involved in the crash. The officer may record no contributing factor or up to two different contributing factors. The leading contributing factors recorded for total crashes and injury crashes were "improper lookout" (14.7 % and 14.1%), while "speed too fast" (15.6%) was the leading contributing factor recorded for fatal crashes. If "driving under the influence", "had been drinking" and "under the influence of drugs" were combined it would be the fourth leading contributing factor for fatal crashes at 7.7%.

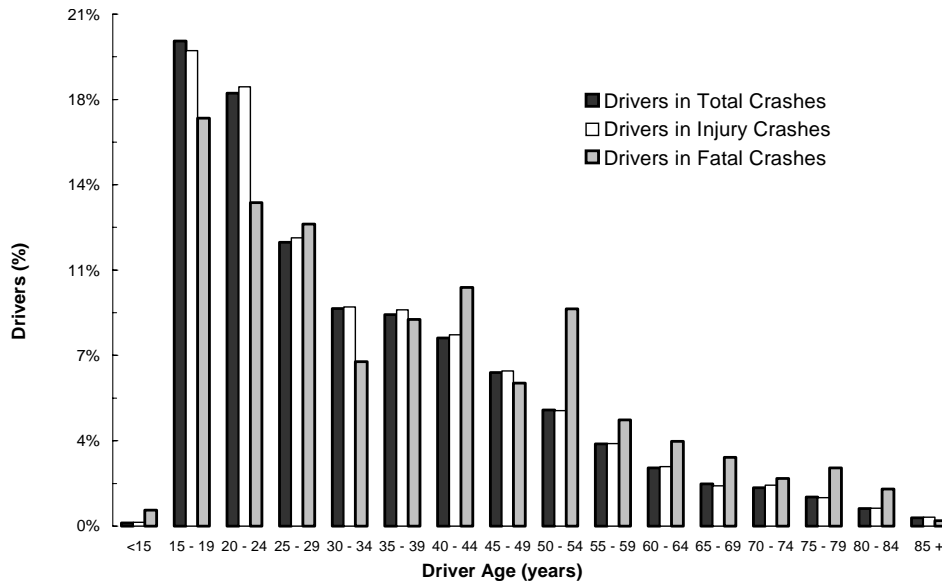
Table 1.13
Contributing
Factors of Total
Crashes, Injury
Crashes and
Fatal Crashes,
Utah 1999

Contributing Factors	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Improper Lookout	16,454	14.7%	6,014	14.1%	50	8.2%
Failed to Yield the Right of Way	10,320	9.2%	4,347	10.2%	25	4.1%
Following Too Closely	7,575	6.8%	2,678	6.3%	2	0.3%
Speed Too Fast	6,604	5.9%	2,674	6.3%	95	15.6%
Other Improper Driving	5,354	4.8%	2,074	4.9%	67	11.0%
Improper Turn	2,488	2.2%	739	1.7%	4	0.7%
Hit and Run	2,310	2.1%	652	1.5%	2	0.3%
Disregarded Traffic Signal	2,216	2.0%	1,189	2.8%	9	1.5%
Driving Under the Influence	1,363	1.2%	760	1.8%	27	4.4%
Improper Overtaking	1,278	1.1%	372	0.9%	8	1.3%
Non-Contact Vehicle Involved	1,103	1.0%	389	0.9%	15	2.5%
Drove Left of Center	1,088	1.0%	466	1.1%	34	5.6%
Asleep	962	0.9%	510	1.2%	32	5.2%
Improper Backing	746	0.7%	52	0.1%	1	0.2%
Passed Stop Sign	706	0.6%	368	0.9%	5	0.8%
Had Been Drinking	439	0.4%	229	0.5%	18	3.0%
Other Defective Condition	366	0.3%	107	0.3%	0	0.0%
Fatigued	352	0.3%	183	0.4%	9	1.5%
Brakes Defective	306	0.3%	117	0.3%	0	0.0%
Tires Defective	279	0.2%	100	0.2%	8	1.3%
Improper Parking	264	0.2%	63	0.1%	0	0.0%
Ill	224	0.2%	145	0.3%	4	0.7%
Cargo Loss or Shift	217	0.2%	47	0.1%	3	0.5%
Failed to Signal	174	0.2%	44	0.1%	1	0.2%
Wrong Side of Road	140	0.1%	58	0.1%	4	0.7%
Non-collision Fire	138	0.1%	7	0.0%	0	0.0%
Under the Influence of Drugs	134	0.1%	85	0.2%	2	0.3%
Jackknife	120	0.1%	28	0.1%	1	0.2%
Down Hill Runaway	111	0.1%	19	0.0%	1	0.2%
Windshield Not Clear	109	0.1%	46	0.1%	1	0.2%
Stolen	98	0.1%	35	0.1%	0	0.0%
Separation of Units	97	0.1%	11	0.0%	1	0.2%
Towed Vehicle	91	0.1%	14	0.0%	0	0.0%
Headlights Insufficient or Out	85	0.1%	36	0.1%	1	0.2%
Vehicle Rolling in Traffic Lane	80	0.1%	22	0.1%	0	0.0%
Other Lights or Reflecting/Defective	77	0.1%	26	0.1%	0	0.0%
Steering Mechanism Defective	66	0.1%	23	0.1%	0	0.0%
Eyesight Defective Uncorrected	56	0.1%	24	0.1%	1	0.2%
Headlights Glaring	33	0.0%	9	0.0%	0	0.0%
Wrong Way on One Way Street	31	0.0%	21	0.0%	1	0.2%
Immersion	28	0.0%	10	0.0%	1	0.2%
Explosion or Fire	21	0.0%	4	0.0%	0	0.0%
Collision Fire	11	0.0%	4	0.0%	3	0.5%
Grand Total	111,812	100.0%	42,549	100.0%	610	100.0%

Drivers Involved in 1999 Crashes

Figure 1.07 shows the age of drivers involved in crashes for 1999. The age distribution of drivers involved in total crashes and injury crashes were similar; drivers between the age of 15 to 19 years represented the highest percentage of drivers involved in these crashes. This age group also represented the largest percentage of drivers involved in fatal crashes. For information regarding crash rate per license driver, see Figure 1.08.

Figure 1.07 Age of Drivers Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999



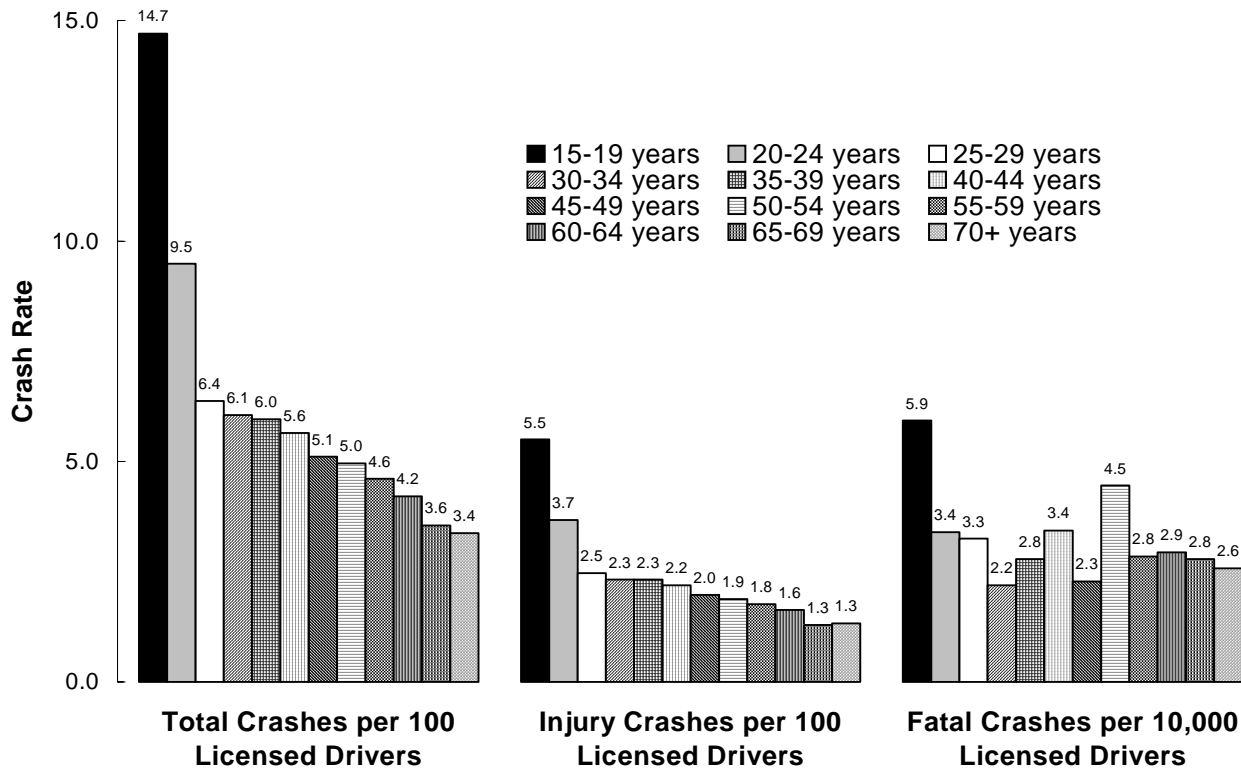
Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. drivers in injury crashes) from age group to age group. Do not compare the heights of the different crash categories for a specific age group.

Table 1.14 Age of Drivers Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Driver's Age	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
<15	115	0.1%	57	0.2%	3	0.7%
15 - 19	19,093	19.9%	7,139	19.5%	77	16.7%
20 - 24	17,037	17.8%	6,596	18.0%	61	13.3%
25 - 29	11,168	11.6%	4,328	11.8%	57	12.4%
30 - 34	8,563	8.9%	3,291	9.0%	31	6.7%
35 - 39	8,326	8.7%	3,244	8.9%	39	8.5%
40 - 44	7,395	7.7%	2,874	7.9%	45	9.8%
45 - 49	6,040	6.3%	2,331	6.4%	27	5.9%
50 - 54	4,563	4.8%	1,734	4.7%	41	8.9%
55 - 59	3,234	3.4%	1,241	3.4%	20	4.3%
60 - 64	2,293	2.4%	890	2.4%	16	3.5%
65 - 69	1,657	1.7%	606	1.7%	13	2.8%
70 - 74	1,514	1.6%	613	1.7%	9	2.0%
75 - 79	1,134	1.2%	429	1.2%	11	2.4%
80 - 84	691	0.7%	265	0.7%	7	1.5%
85 +	321	0.3%	134	0.4%	1	0.2%
Missing	2,778	2.9%	838	2.3%	2	0.4%
Grand Total	95,922	100.0%	36,610	100.0%	460	100.0%

Similar trends in the age of drivers involved in crashes are illustrated in Figure 1.08 which shows the crash rate per licensed drivers. Drivers aged 15 to 19 years experienced the highest total crash, injury crash and fatal crash rates. Drivers aged 50 to 54 years had the second highest fatal crash rate.

Figure 1.08 Age of Driver by Crash Rate per Licensed Driver*, Utah 1999



*The number of licensed drivers was provided by the Utah Driver License Division.

Table 1.15 shows males represented 58% of all drivers involved in a crash, and 71.9% of drivers involved in fatal crashes. Females accounted for 40.1% of drivers involved in a crash, but they represented a slightly higher percentage of drivers in injury crashes at 43%.

Table 1.15 Gender of Drivers Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Driver's Gender	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Female	38,465	40.1%	15,751	43.0%	135	27.4%
Male	55,589	58.0%	20,379	55.7%	324	71.9%
Missing	1,868	1.9%	480	1.3%	1	0.6%
Grand Total	95,922	100.0%	36,610	100.0%	460	100.0%

Out of State Drivers Involved in Utah 1999 Crashes

Table 1.16 shows the state of licensure for drivers involved in Utah crashes. While out-of-state licensed drivers accounted for 8.9% of drivers involved in crashes, they represented 22.8% of drivers involved in fatal crashes. This may be due in part to fatigued driving on out-of-state trips. There were several counties that had a disproportional amount of out-of-state drivers (Table 1.17). Most notably, Kane (51.8%), Grand (46.1%), San Juan (42.0%) and Garfield (39.2%) had a high proportion of out-of-state licensed drivers involved in crashes. These drivers may place an undue burden on the residents and medical services in these counties.

Table 1.16 State of Licensure for Drivers Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Drivers License State	Total Crashes		Injury Crashes		Fatal Crashes	
	#	%	#	%	#	%
Out of State	8,552	8.9%	3,155	8.6%	105	22.8%
Utah	84,040	87.6%	32,414	88.5%	351	76.3%
Missing	3,330	3.5%	1,041	2.8%	4	0.9%
Grand Total	95,922	100.0%	36,610	100.0%	460	100.0%

Table 1.17 State of Licensure for Drivers by County, Utah 1999

County	Total Drivers	Out of State Drivers	
		#	%
Beaver	370	109	29.5%
Box Elder	1,197	242	20.2%
Cache	3,570	376	10.5%
Carbon	606	63	10.4%
Daggett	38	14	36.8%
Davis	7,484	471	6.3%
Duchesne	372	20	5.4%
Emery	367	112	30.5%
Garfield	176	69	39.2%
Grand	345	159	46.1%
Iron	1,311	262	20.0%
Juab	420	79	18.8%
Kane	245	127	51.8%
Millard	535	160	29.9%
Morgan	174	19	10.9%
Piute	47	10	21.3%
Rich	82	17	20.7%
Salt Lake	46,957	2,718	5.8%
San Juan	412	173	42.0%
Sanpete	560	27	4.8%
Sevier	755	209	27.7%
Summit	1,153	271	23.5%
Tooele	1,076	141	13.1%
Uintah	683	56	8.2%
Utah	15,203	1,661	10.9%
Wasatch	757	65	8.6%
Washington	3,030	441	14.6%
Wayne	104	25	24.0%
Weber	7,893	456	5.8%
Grand Total	95,922	8,552	8.9%